An asset-based approach to measuring vulnerability in OECD countries

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Vulnerability

“A person (or household) is vulnerable to future loss of well-being below some socially-accepted norms if he or she lacks (or is strongly disadvantaged in the distribution of) assets which are crucial for resilience to risks.”

- Focuses on the resources people can draw on to manage diverse risks.
- Ability to minimise well-being losses after a crisis (e.g. job loss, ill health) depends on people’s assets.
The asset-based approach

- Assets considered in a broad sense.
- Tangible and intangible **stocks** of wealth used by households/individuals to generate well-being:
  - Economic capital
  - Human capital
  - Social capital
  - Collective assets
The role of assets in reducing vulnerability
Economic capital

- Focusing on stocks, not flows, so looking at net worth and asset ownership rather than income measures

Source: Brandolini et al., 2010
The “net-worth” poor and the “liquid asset” poor represent a larger share of the population than the income poor.
Measuring economic capital stocks

• Ideal indicators: Net Worth and Liquid Assets, available from the LWS, however there are drawbacks to this approach.

• Next best: Subjective Illiquidity, Home Ownership from EU-SILC.
Home ownership reduces risk of material deprivation

Inability to face unexpected expenses
Inability to keep home adequately warm
Inability to afford a health diet
Arrears on utility bills

Owner not paying a mortgage
Tenant at market rate
Rented at reduced rate
Free of use
Comparing subjective illiquidity and objective indicators of poverty in EU countries

- Subjective illiquidity
- Income poverty
- Net worth poverty
- Liquid asset poverty
Probability of moving into income poverty by selected characteristics

- **Permanence in Sub. Liq Asset Poverty**
  - Always: 1.8
  - At least once: 1.5
  - Never (base): 1.0

- **Average Household's ISCED Level**
  - ISCED 0-1: 3.0
  - ISCED 1-2: 2.0
  - ISCED 2-4: 1.2
  - ISCED 4-5 (base): 1.0

- **First or Second Quintile in 2005**
  - Yes: 3.6
  - No (base): 1.0

- **House Tenure Status**
  - Rented: 1.3
  - Free: 1.2
  - Owner (base): 1.0

- **Financial Burden of Housing Costs**
  - A heavy burden: 1.5
  - Some burden: 1.0
  - No burden (base): 1.0

- **N. Components**
  - 5 or more: 1.7
  - 1: 1.0
  - 2-4 (base): 1.0

Odds ratios
Human capital

OECD definition: “knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being”.

Encompasses:
- Education
- Skills (cognitive and non-cognitive)
- Health (mental and physical)
The highly-skilled exit unemployment faster.
Measuring human capital – educational attainment

Early school leavers in Europe, 2009
% of 18-24 yr-olds, less than upper secondary education and not in education or training.
Broader measures of human capital – data sources

• Skills
  – Cognitive skills, schoolchildren (PISA)
  – Non-cognitive skills/personality traits
  – Adult skills (PIAAC, ALLS, IALS)

• Health
  – Physical health (EU-SILC)
  – Mental health
Social capital

- **OECD definition:** “networks together with shared norms, values and understandings that facilitate co-operation within or among groups”.

- **Encompasses:**
  - Networks (“strong” and “weak” ties)
  - Values/Norms (trust, reciprocity, tolerance, etc.)
Social capital is linked to economic productivity at the aggregate level

Source: Morrone et al. 2009
At the individual level, social engaged people are less likely to be materially deprived.

<table>
<thead>
<tr>
<th>Social engagement</th>
<th>Unable to face unexpected expenses</th>
<th>Unable to keep home adequately warm</th>
<th>Unable to afford a healthy diet</th>
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<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
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<tr>
<td>1st quintile</td>
<td>64.6</td>
<td>46.7</td>
<td>25.4</td>
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<td>2nd quintile</td>
<td>49.8</td>
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<td>3rd quintile</td>
<td>38.7</td>
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<td>26.4</td>
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<td>10.2</td>
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<td>5th quintile</td>
<td>14.9</td>
<td>6.5</td>
<td>5.6</td>
</tr>
<tr>
<td>All</td>
<td>43.3</td>
<td>21.8</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Source: EU-SILC, 2006
Measuring social capital – perceived social network support

Source: EU-SILC, 2006
Measuring social capital - challenges

• Ongoing data collection needed.
• Geographic data, at municipal/community/neighbourhood level needed.
• More research needed on:
  – Direction of causality
  – Relationship between social contact and transitioning out of adverse situation.
Collective assets

• Public goods available “to all”
  – Universal
  – Targeted
  – Local

• Report focuses on state-provided resources such as healthcare, education, and social assistance.
Where out-of-pocket payments for health care are high, so is the occurrence of “catastrophic expenditure”
Public transfers significantly reduce poverty

Source: OECD, 2008, Growing Unequal
Measuring collective assets – adequacy and coverage

Access to local services – difficulty accessing public transport

Measuring collective assets – the way ahead

• Measures of coverage are useful, but need better measures of effectiveness of public services and systems
• However, this lies at the very heart of social policy analysis – an ambitious goal.
• EU-SILC data on access to local services can provide a first step to identifying vulnerable populations.
Measuring multi-dimensional vulnerability

- The most vulnerable are those who lack assets in more than one area.
- Need to identify/develop surveys collecting data on multiple asset types.
- EU-SILC provides a first step.
Share of people experiencing multiple vulnerabilities

![Graph showing the share of people experiencing multiple vulnerabilities across different countries in the EU27, with categories for two and three vulnerabilities, and average values for the EU27. The countries are listed on the x-axis, and the share values are on the y-axis. The graph compares the share of people experiencing two vulnerabilities against those experiencing three, with average values for the EU27.]
Risk of poverty and conjoint vulnerabilities

The scatter plot shows the relationship between the at-risk-of-poverty rate and the number of conjoint vulnerabilities across various countries, represented by different symbols. The plot includes a trend line with the equation: $R^2_{\text{Linear}} = 0.241$. This indicates a moderate linear relationship between the two variables. Each country is labeled with its abbreviation, and the scatter points are distributed along the trend line, suggesting that countries with higher numbers of conjoint vulnerabilities also have a higher at-risk-of-poverty rate.
The challenge ahead

- Vulnerability is a function of accessibility to all types of capital.
- It would be critical to look at the overlap between the populations with low economic capital, low human capital, low social capital, and poor access to collective assets.
- Information on ownership and access to each of the types of assets could be collected using EU-SILC or, in alternative, techniques to link micro records from different surveys.
- Work needed to have a better understanding of appropriate thresholds. Here many choices could be seen as arbitrary, and vulnerability may be better understood as a continuum.